Proposal for Formation of the

Interagency Ecological Program Tidal Wetland Monitoring Project Work Team

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The Interagency Ecological Program (IEP)

IEP is a consortium of nine state and federal agencies that conducts research and monitoring in the San Francisco estuary. For the past 40 years, IEP scientists and its partners (e.g. universities, NGOs) have worked to: 1) describe the status and trends of aquatic ecological factors of interest in the estuary; 2) develop an understanding of environmental factors that influence the resources of the estuary; and 3) provide information to support natural resource planning, management, and regulatory activities in the estuary. One of the most effective tools for IEP activities has been the formation of Project Work Teams (PWTs) that focus on specific research and monitoring topics of interest. Examples of some of the current PWTs are available at IEP's website:

http://www.water.ca.gov/iep/docs/IEP-ORG.pdf

The purpose of these teams includes the following: to organize new studies, to review study plans and proposals, to write scientific papers and reports, and to promote collaboration among different groups working on the topic of interest.

Tidal Wetland Restoration in the Delta

Several current programs mandate restoration of tidal wetlands in the Sacramento-San Joaquin Delta. Tidal wetland restoration has been identified as a key priority by the Ecosystem Restoration Program (ERP), National Marine Fisheries Service (Biological Opinion on the Long-Term Central Valley Project and State Water Project Operation Criteria and Plan, 2009), the USFWS Biological Opinion on delta smelt, the National Academy of Sciences independent review committee (2008), and the Bay Delta Conservation Plan (BDCP). The goals of current restoration projects are to: 1) provide rearing habitat for native fishes; and 2) improve food web production.

In 2010, DFW and DWR signed the Fish Restoration Program Agreement (FRPA) to work cooperatively to satisfy obligations under the biological opinions for tidal wetlands restoration. Several restoration projects are under development in this program. In 2013, the DFW began staffing a program to monitor the success of the FRPA projects in meeting biological goals, and to evaluate project benefits and impacts.

Proposed IEP Project Work Team

Despite the coordinated efforts to implement tidal wetland restoration projects in the Delta, Suisun Marsh, and the Cache Slough Complex, there has been little coordination to date on the design of a standardized biological monitoring program. There is a strong need for an interdisciplinary, interagency, team to collaborate in the design of a system-wide monitoring program based on sound science.

Hence, IEP proposes to form a PWT to:

- 1) Lead and support the development of a system-wide biological monitoring program for restored tidal wetlands,
- 2) Lead and participate in the development of site-specific biological monitoring plans for tidal wetland projects concurrent with implementation planning,
- 3) Provide guidance and review of tidal wetland research and monitoring proposals.

Note that the PWT is not intended to design and recommend restoration projects, although we anticipate information developed will be very useful to resource and restoration managers.

Examples of Invited PWT Activities

- **Activity 1:** Develop conceptual models for the biological function of restored tidal wetlands in the Delta, Suisun Marsh, and the Cache Slough Complex. Conceptual models will include vegetation colonization and expansion in restoring wetlands, and the ecological response of native fish and wildlife species of concern to the evolving tidal wetland.
- **Activity 2:** Based on the conceptual models, design a system-wide standardized approach for biological monitoring in the restored tidal wetlands. This activity may include consultation with monitoring experts from other regions.
- **Activity 3:** Assist in the development of site-specific monitoring plans for tidal wetland projects during the planning phases.
- **Activity 4:** Provide recommendations for focused research on tidal wetland function in areas of scientific uncertainty.
- Activity 5: Review and provide comments on monitoring and research proposals.